REMARKS

Summary

Claims 4-6 were pending. Claim 4 has been rewritten and Claims 7-12 added. No new matter has been added as a result of the amendment.

Rejection of Claims

Claims 4-5 were rejected under 35 U.S.C. §102(b) as being anticipated by Saenger (U.S. Patent 5,712,759) and Claim 6 was rejected under 35 U.S.C. §103(a) as being unpatentable over Saenger in view of Hagerup (U.S. Patent 6,477,054). Applicant has rewritten Claim 4 and added Claims 7-12. Applicant submits that Claim 4 overcomes the rejection.

Claim 4 recites, inter alia, a thin-film capacitor element that comprises an insulative substrate having a via hole filled with a conductive material, a lower electrode disposed on the insulative substrate, a dielectric layer, and an upper electrode. The dielectric layer is disposed on the lower electrode, and the upper electrode on the dielectric layer. At least a portion of the upper and lower electrodes overlap with the dielectric layer therebetween in a direction perpendicular to a face of the substrate. Such an arrangement permits formation of the thin-film capacitor element relatively quickly by techniques such as plasma deposition or CVD.

Saenger does not anticipate or disclose such an arrangement. More specifically, Saenger teaches a sidewall capacitor in which the lower electrode 110 is formed on a substrate 102, the dielectric layer 106 is formed on a portion of the substrate 102 on which the lower electrode 110 is not formed, and the upper electrode 116 is formed on the dielectric layer 106. The capacitor is formed between lateral portions of the lower electrode 110 and the upper electrode 116, in a direction parallel with the surface of the substrate 102. Moreover, Saenger teaches the importance of the L-shaped capacitor, for example, in the paragraphs of col. 4, line 57 – col. 5, line 17. Accordingly, Saenger does not anticipate or disclose an arrangement in which the lower electrode is disposed on the insulative substrate, the dielectric layer is disposed on the lower electrode, the upper electrode on the dielectric layer,

and at least a portion of the upper and lower electrodes overlap with the dielectric layer therebetween in a direction perpendicular to a face of the substrate, as recited in Claim 4.

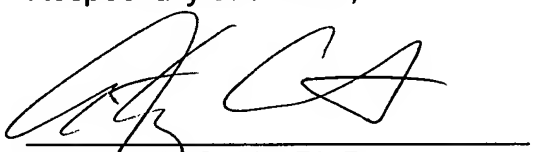
For at least these reasons, Saenger does not anticipate or disclose the arrangement recited in Claim 4. Thus, Claim 4 is patentable over the cited references.

Dependent Claims 5-12 are dependent upon an allowable claim. Thus, the dependent claims are allowable, without more.

Conclusion

In view of the amendments above, Applicant seeks an allowance thereof. If for any reason the Examiner is unable to allow the application in the next Office Action and believes that a telephone interview would be helpful to resolve any remaining issues, he is respectfully requested to contact the undersigned.

Respectfully submitted,



Anthony P. Curtis, Ph.D.
Registration No. 46,193
Agent for Applicant

BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, ILLINOIS 60610
(312) 321-4200